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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
ZAND, KAMBIZ	

ART UNIT	PAPER NUMBER
2132	16

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/475,661	KUNG ET AL.	
	Examiner	Art Unit	
	Kambiz Zand	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 December 1999*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 December 1999* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3, 7, 8, 9.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. **Claims 1-19** have been examined.

2. Examiner has approved Title amendment filed on 03/08/2000.

Information Disclosure Statement PTO-1449

3. The pages of the all references submitted by applicant have been considered.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description Page pages 7-11 refers to item "1". Correction is required.

Specification

5. The disclosure is objected to because of the following informalities:

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph **on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length** since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

8. **Claims 1-19** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1-19, the "gateway" phrases make the claims indefinite and unclear in that neither means nor interrelationship of means are set forth in these claims in order to achieve the desired results expressed in the "gateway" phrases. Examiner considers "gateway" as device of the sender or the receiver in the system for the purpose of examination.

In claims 1-19, the "gateway" phrases make the claims indefinite and unclear in that neither method steps nor interrelationship of method steps are set forth in these claims in order to achieve the desired results expressed in the "gateway" phrases. Examiner considers "gateway" as device of the sender or the receiver in the system for the purpose of examination.

In claim 1 the phrase "terminating subscriber gateway" makes the claims indefinite and unclear since nowhere in claim 1 an action of termination is being disclosed. Therefore examiner considers "terminating subscriber gateway" phrase as a receiver entity, receiving packet data from a source (originating subscriber gateway) for the purpose of examination.

In claim 1 the phrase "terminating subscriber gateway" makes the claims indefinite and unclear since nowhere in claim 1 an action of termination is being disclosed. Therefore examiner considers "terminating subscriber gateway" phrase as a receiver entity,

receiving packet data from a source (originating subscriber gateway) for the purpose of examination.

In claim 1, the "for use.." phrases makes the claims indefinite and unclear in that neither means nor interrelationship of means are set forth in these claims in order to achieve the desired results expressed in the "for use..." phrases.

In claim 1, the "for use.." phrases make the claims indefinite and unclear in that neither method steps nor interrelationship of method steps are set forth in these claims in order to achieve the desired results expressed in the "for use..." phrases.

In claims 2-4, the "wherein.." phrases makes the claims indefinite and unclear in that neither means nor interrelationship of means are set forth in these claims in order to achieve the desired results expressed in the "wherein..." phrases.

In claims 2-4, the "wherein.." phrases makes the claims indefinite and unclear in that neither method steps nor interrelationship of method steps are set forth in these claims in order to achieve the desired results expressed in the "wherein..." phrases.

In claim 5, the "steps i through iii" phrases makes the claims indefinite and unclear in that neither means nor interrelationship of means are set forth in these claims in order

to achieve the desired results expressed in the ""steps i through iii" phrases. Examiner considers the steps I-iii as steps of claim 1 for the purpose of examination.

9. Claims 1 recites the limitation "said first confidential password" in the claim. There is insufficient antecedent basis for this limitation in the claim. Examiner considers "said confidential password" as "first confidential key" for the purpose of examination.

10. Claims 13 recites the limitation "the initial step" in the claim. There is insufficient antecedent basis for this limitation in the claim.

11. Claims 2-14 are rejected based on their dependency on rejected claim 1 having incorporated the limitations of claim 1.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application

being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

13. **Claims 1-19** are rejected under 35 U.S.C. 102(e) as being anticipated by Akins, III et al (6,526,508 B2).

As per claims 1 and 4 Akins, III et al (6,526,508 B2) teach a method for securing a communication comprising the steps of assigning a first confidential key at a server for use by an originating subscriber gateway (see fig.6 where the digital broadband delivery system that corresponds to Applicant's originating subscriber gateway includes a server 501 that corresponds to the server used by originating subscriber gateway and the key are assigned in item 627 or 603 TED where the storage of keys for encryption and /or decryption is stored and where in col.17, lines 27-46 it has been detailed); and , transmitting said first confidential key or a password from said originating subscriber gateway to a terminating subscriber gateway in advance of or simultaneous with a first encrypted data packet (see transmission of a confidential key such as control word CW in col.4, lines 51-55 that simultaneously being transmitted with the instance that contains instance data with respect to programming and entitlement information as disclosed in col.4, lines 28-35), said first encrypted data packet being encrypted with said first confidential key (see fig.2a where the control word that corresponds to applicant's confidential key is being generated in item 203 and it is being used to

encrypt the program as being disclosed by item 202 and 201 and transmitted), and exchanging packets encrypted via said first confidential key between said originating and said terminating subscriber gateway (see fig.7 where the pocketsize stream of data for transmission to the output from the delivery system that corresponds to applicant's originating gateway and the receiver top box corresponding to applicant's terminating subscriber in col.4, lines 63-67; col.5, lines 1-14; col.7, lines 27-65; also fig.4 disclose the exchange of the packet data between the two party above through transmission medium 331; see col.5, lines 33-35; Also see fig.2a, item 203 where the control word generator replaces the original control word that corresponds to applicant's confidential key on random interval disclose that each time the new key is generated the data is encrypted with the new replacement key as recited in claim 4).

As per claim 2 Akins, III et al (6,526,508 B2) teach the method as recited in claim 1 wherein said server assigns replacement first confidential keys at random intervals of time (see fig.2a, item 203 where the control word generator replaces the original control word that corresponds to applicant's confidential key on random interval).

As per claim 3 Akins, III et al (6,526,508 B2) teach the method as recited in claim 1 wherein said server assigns replacement first confidential keys every N packets where N may be one or more (see col.4, lines 4, lines 35-64 where on random interval sometimes a few second a new key or control word is generated; and col.18, lines 36-67 disclose the content is being transmitted in packet format stream transmission where

each packet has an id belonging to the packet transmitted group and therefore every few second a packet N has a new key based on the control word generator).

As per claim 5 Akins, III et al (6,526,508 B2) teach the method as recited in claim 1 comprising the steps of, after a predetermined period of time, the originating subscriber gateway signaling the terminating subscriber gateway to take control and the terminating subscriber gateway performing steps i through iii as a replacement originating subscriber gateway, the originating subscriber gateway becoming the terminating subscriber gateway (see rejection of the steps of claim 1 above; and col.10, lines 53-55 where the DHCT 333 may also communicate in reverse path executing the same above conditions and that is the receiver becomes the sender or in applicant's words the originating subscriber becomes the terminating subscriber).

As per claims 6 and 10 Akins, III et al (6,526,508 B2) teach the method for securing a communication as recited in claim 1 where the communication is a multimedia communication comprising audio, video and data (see fig.3, item 325) and one of audio, video and data are encrypted at a first level of security (see fig.3, items 325 and 327) and another of audio, video and data are encrypted at a second level of security (see fig.2a where three level of encryption is available for clear MPEG-2 program that inherently contains at least video or audio).

As per claim 7 Akins, III et al (6,526,508 B2) teach the method as recited in claim 1 comprising the step of receiving a second key from a user and transmitting said second key from said originating subscriber gateway to said terminating subscriber gateway, said originating and terminating subscriber gateway utilizing a two key encryption algorithm (see fig.2a where by using 2nd level encryption a second key such as multi-session key is being used and a two key algorithm encryption is being disclosed in item 204 using the inputs of first key or confidential key 203 and 2nd key 208 the output of item 205).

As per claim 8 Akins, III et al (6,526,508 B2) teach the method as recited in claim 1 further comprising the steps of receiving keys at an intermediate server from the originating and terminating gateway and an indication of the encryption algorithm utilized by each gateway and translating an encrypted message at said intermediate server between said originating and terminating gateways between one encryption algorithm and another (see fig.2a where using the third level encryption involves third party certification of the keys used for encryption as detailed also in col.60-67).

As per claim 9 Akins, III et al (6,526,508 B2) teach the method as recited in claim 6 further involving a third party, the third party having access to a first level of security and not a second level of security, the third party capable of receiving one of audio, video and data and not receiving another of audio, video and data (see fig.2a where each level of security is independent of other and having access to one level do not

guarantee having access to other level as disclosed in detailed in col.60-67 where the certification authority only deals with certification of the keys with respect to the third encryption level that contain public key encryption and not first level of encryption).

As per claim 11 Akins, III et al (6,526,508 B2) teach the method as recited in claim 1 further comprising the steps of said server downloading an encryption algorithm to said originating and terminating subscriber gateways (see fig.2a where by utilizing the encryption algorithm the downloading becomes a nasality).

As per claim 12 Akins, III et al (6,526,508 B2) teach the method as recited in claim 11 further wherein said downloading of an encryption algorithm occurs at random intervals during a communication (see fig.2a where the random generator 203 necessitate downloading at random interval).

As per claim 13 Akins, III et al (6,526,508 B2) teach the method as recited in claim 1 further comprising the initial step of said originating subscriber gateway registering with said server, the originating subscriber gateway receiving the first confidential key in response to completion of the registration step (see col.55-67; col.33, lines 1-5; col.5-64).

As per claim 14 Akins, III et al (6,526,508 B2) teach the method as recited in claim 13 further comprising the step of receiving a secure call command during a communication for one of audio, video, data and multimedia (see col.6, lines 24-55; fig.2a).

As per claim 15 Akins, III et al (6,526,508 B2) teach a system providing secure communications in an integrated broadband communication system, including: a secured communication server providing security keys for encrypting and decrypting communication information; and a first intelligent gateway that encrypts and decrypts packets of communication information using said security keys provided by said secured communication server in real time in response to user input during a communication session (see fig.6 where the digital broadband delivery system that corresponds to Applicant's first intelligent gateway includes a server 501 that corresponds to the server used by the gateway and the key are assigned in item 627 or 603 TED where the storage of keys for encryption and /or decryption is stored and where in col.17, lines 27-46 it has been detailed; see transmission of a confidential key such as control word CW in col.4, lines 51-55 that simultaneously being transmitted with the instance that contains instance data with respect to programming and entitlement information as disclosed in col.4, lines 28-35; and col.15, lines 6-66 where encryption and decryption of the packets are detailed and where the providing of the keys are disclosed).

As per claim 16 Akins, III et al (6,526,508 B2) teach the system according to claim 15, further comprising a second intelligent gateway that encrypts and decrypts packets of communication using a security key received from said first intelligent gateway (see fig.7 where the pocketsize stream of data for transmission to the output from the delivery system that corresponds to applicant's first intelligent gateway and the receiver top box corresponding to applicant's second intelligent gateway in col.4, lines 63-67; col.5, lines 1-14; col.7, lines 27-65; also fig.4 disclose the exchange of the packet data between the two party above through transmission medium 331; see col.5, lines 33-35).

As per claim 17 Akins, III et al (6,526,508 B2) teach the system according to claim 16, wherein said first intelligent gateway is a customer gateway and said second intelligent gateway is a customer gateway (see abstract where many top boxes may be involved in the broadcasting of the MPEG and where as detailed in claim 15 the sender and the receiver has same capability and therefore both can act as the receiver from another provider utilizing the same method as above).

As per claim 18 Akins, III et al (6,526,508 B2) teach the system according to claim 16, wherein said first intelligent gateway is a customer gateway and said second intelligent gateway is a gateway that couples said broadband communication system with another communication system (see fig.fig.5; and claim 15 above).

As per claim 19 Akins, III et al (6,526,508 B2) teach the system according to claim 18, wherein said another communication system is a public switched telephone network (see col.5, lines 8-11 where Rf frequency is disclosed, a feature inherent in switch networking).

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S.Patent No. US (6,473,858 B1) teach method and apparatus for broadcasting data with access control.

U.S.Patent No. US (6,546,488 B2) teach broadcast delivery of information to a personal computer for local storage and access.

U.S.Patent No. US (6,374,296 B1) teach method and system for providing cross-platform remote control and monitoring of facility access controller.

U.S.Patent No. US (6,606,744 B1) teach providing collaborative installation management in a network-based supply chain environment.

U.S.Patent No. US (6,594,254 B1) teach domain name server architecture.

U.S.Patent No. US (6,570870 B1) teach method and system for making a charged telephone call during an Internet browsing session.

U.S.Patent No. US (6,426,955 B1) teach Internet telephony call routing engine.

U.S.Patent No. US (6,233,318 B1) teach system for accessing multimedia mailboxes and messages over the Internet and via telephone.

U.S.Patent No. US (6,611,531 B1) teach method and apparatus for routing integrated data, voice, and video traffic.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kambiz Zand whose telephone number is (703) 306-4169. The examiner can normally reached on Monday-Thursday (8:00-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone numbers for the organization where this application or proceeding is assigned is as follow: (703) 872-9306.

Kambiz Zand

11/23/03

Gilberto Barron

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